# IDENTIFYING ESSENTIAL CRITICAL INFRASTRUCTURE WORKERS

Essential workers are defined as workers who conduct a range of services that are essential to continued critical operations, maintaining and repairing support, operating call centers, and management, among others. The industries they support represent medical and healthcare, telecommunications, information technology, defense, food and agriculture, transportation and logistics, energy, water and wastewater, law enforcement, and public works.

## Essential Critical Infrastructure Workers

## CHEMICAL

- Workers supporting the chemical and industrial gas supply chains, including workers at chemical manufacturing plants, workers in laboratories, workers at distribution facilities, workers who transport basic raw chemical materials to the producers of industrial and consumer goods, including hand sanitizers, food and food additives, pharmaceuticals, textiles, and paper products.
- Workers supporting the safe transportation of chemicals, including those supporting tank truck cleaning facilities and workers who manufacture packaging items
- Workers supporting the production of protective cleaning and medical solutions, personal protective equipment, and packaging that prevents the contamination of food, water, medicine, among others essential products
- Workers supporting the operation and maintenance of facilities (particularly those with high risk chemicals and/ or sites that cannot be shut down) whose work cannot be done remotely and requires the presence of highly trained personnel to ensure safe operations, including plant contract workers who provide inspections
- Workers who support the production and transportation of chlorine and alkali manufacturing, single-use plastics, and packaging that prevents the contamination or supports the continued manufacture of food, water, medicine, and other essential products, including glass container manufacturing

## COMMERCIAL FACILITIES

- Workers who support the supply chain of building materials from production through application/installation, including cabinetry, fixtures, doors, cement, hardware, plumbing, electrical, heating/cooling, refrigeration, appliances, paint/coatings, and employees who provide services that enable repair materials and equipment for essential functions
- Workers supporting ecommerce through distribution, warehouse, call center facilities, and other essential operational support functions

- Workers in hardware and building materials stores, consumer electronics, technology and appliances retail, and related merchant wholesalers and distributors - with reduced staff to ensure continued operations.
- Workers distributing, servicing, repairing, installing residential and commercial HVAC systems, boilers, furnaces and other heating, cooling, refrigeration, and ventilation equipment.

# COMMUNICATIONS AND INFORMATION TECHNOLOGY

**Communications:**
- Maintenance of communications infrastructure- including privately owned and maintained communication systems- supported by technicians, operators, call-centers, wireline and wireless providers, cable service providers, satellite operations, undersea cable landing stations, Internet Exchange Points, and manufacturers and distributors of communications equipment
- Government and private sector employees (including government contractors) with work related to undersea cable infrastructure and support facilities, including cable landing sites, beach manhole vaults and covers, submarine cable depots and submarine cable ship facilities
- Government and private sector employees (including government contractors) supporting Department of Defense internet and communications facilities
- Network Operations staff, engineers and/or technicians to include IT managers and staff, HVAC & electrical engineers, security personnel, software and hardware engineers, and database administrators that manage the network or operate facilities.

- Workers who support radio, television, and media service, including, but not limited to front line news reporters, studio, and technicians for newsgathering and reporting
- Workers at Independent System Operators and Regional Transmission Organizations, and Network Operations staff, engineers and/or technicians to manage the network or operate facilities
- Engineers, technicians and associated personnel responsible for infrastructure construction and restoration, including contractors for construction and engineering of fiber optic cables
- Installation, maintenance and repair technicians that establish, support or repair service as needed
- Central office personnel to maintain and operate central office, data centers, and other network office facilities
- Customer service and support staff, including managed and professional services as well as remote providers of support to transitioning employees to set up and maintain home offices, who interface with customers to manage or support service environments and security issues, including payroll, billing, fraud, and troubleshooting
- Workers providing electronic security, fire, monitoring and life safety services, and to ensure physical security, cleanliness and safety of facilities and personnel, including temporary licensing waivers for security personnel to work in other States of Municipalities
- Dispatchers involved with service repair and restoration
- Retail customer service personnel at critical service center locations for onboarding customers, distributing and repairing equipment and addressing customer issues in order to support individuals' remote emergency communications needs, supply chain and logistics personnel to ensure goods and products are on-boarded to provision these front-line employees
- External Affairs personnel to assist in coordinating with local, state and federal officials to address communications needs supporting COVID-19 response, public safety, and national security
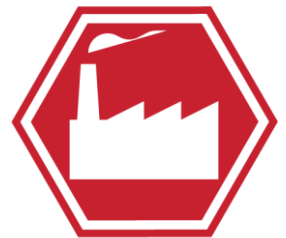
**Information Technology:**

- Workers who support command centers, including, but not limited to Network Operations Command Center, Broadcast Operations Control Center and Security Operations Command Center
- Data center operators, including system administrators, HVAC & electrical engineers, security personnel, IT managers, data transfer solutions engineers, software and hardware engineers, and database administrators
- Client service centers, field engineers, and other technicians supporting critical infrastructure, as well as manufacturers and supply chain vendors that provide hardware and software, and information technology equipment (to include microelectronics and semiconductors) for critical infrastructure
- Workers responding to cyber incidents involving critical infrastructure, including medical facilities, SLTT governments and federal facilities, energy and utilities, and banks and financial institutions, and other critical infrastructure categories and personnel
- Suppliers, designers, transporters and other workers supporting the manufacture, distribution and provision and construction of essential global, national and local infrastructure for computing services (including cloud computing services and telework capabilities), business infrastructure, financial transactions/services, web- based services, and critical manufacturing
- Workers supporting the provision of essential global, national and local infrastructure for computing services (incl. cloud computing services), business infrastructure, web-based services, and critical manufacturing
- Workers supporting communications systems and information technology used by law enforcement, public safety, medical, energy and other critical industries
- Support required for continuity of services, including janitorial/cleaning personnel
- Employees required in person to support Software as a Service business that enable remote working, performance of business operations, distance learning, media services, and digital health offerings, or required for technical support crucial for business continuity and connectivity

# CRITICAL MANUFACTURING

- Workers necessary for the manufacturing of metals (including steel and aluminum), industrial minerals, semiconductors, materials and products needed for medical supply chains, and for supply chains associated with transportation, energy, communications, information technology, food and agriculture, chemical manufacturing, nuclear facilities, wood products, commodities used as fuel for power generation facilities, the operation of dams, water and wastewater treatment, processing and reprocessing of solid waste, emergency services, and the defense industrial base. Additionally, workers needed to maintain the continuity of these manufacturing functions and associated supply chains, and workers necessary to maintain a manufacturing operation in warm standby
- Workers necessary for the manufacturing of materials and products needed to manufacture medical equipment and personal protective equipment (PPE)
- Workers necessary for mining and production of critical minerals, materials and associated essential supply chains, and workers engaged in the manufacture and maintenance of equipment and other infrastructure necessary for mining production and distribution
- Workers who produce or manufacture parts or equipment that supports continued operations for any essential services and increase in remote workforce (including computing and communication devices, semiconductors, and equipment such as security tools for Security Operations Centers (SOCs) or datacenters)

## DEFENSE INDUSTRIAL BASE

- Workers who support the essential services required to meet national security commitments to the federal government and U.S. Military. These individuals, include but are not limited to, aerospace; mechanical and software engineers, manufacturing/production workers; IT support; security staff; security personnel; intelligence support, aircraft and weapon system mechanics and maintainers
- Personnel working for companies, and their subcontractors, who perform under contract to the Department of Defense providing materials and services to the Department of Defense, and government-owned/contractor-operated and government-owned/government-operated facilities

## ENERGY

- **Electricity industry:**
  - Workers supporting the energy sector, regardless of the energy source (including not limited to nuclear, fossil, hydroelectric, or renewable), segment of the system, or infrastructure the worker is involved in, or who are needed to monitor, operate, engineer, and maintain the reliability, safety, environmental health, and physical and cyber security of the energy system.
  - Energy/commodity trading/scheduling/marketing functions, who can't perform their duties remotely.
  - Workers who maintain, ensure, or restore the generation, transmission, and distribution of electric power, including call centers, utility workers, reliability engineers and fleet maintenance technicians
  - Workers needed for safe and secure operations at nuclear generation
  - Workers at generation, transmission, and electric blackstart facilities
  - Workers at Reliability Coordinator (RC), Balancing Authorities (BA), and primary and backup Control Centers (CC), including but not limited to independent system operators, regional transmission organizations, and balancing authorities
  - Mutual assistance personnel
  - IT and OT technology staff – for EMS (Energy Management Systems) and Supervisory Control and Data
  - Workers supporting the energy sector through renewable energy infrastructure (including, but not limited to wind, solar, biomass, hydrogen, ocean, geothermal, and/or hydroelectric), including those supporting construction, manufacturing, transportation, permitting, operation/maintenance, monitoring, and logistics.
  - Providing services related to energy sector fuels (including, but not limited, petroleum (crude oil), natural gas, propane, natural gas liquids, other liquid fuels, nuclear, and coal), supporting the mining, processing, manufacturing, construction, logistics, transportation, permitting, operation/maintenance, security, waste disposal and storage, and monitoring of support for resources.
  - Manufacturing and distribution of equipment, supplies, and parts necessary to maintain production, maintenance, restoration, and service at energy sector facilities (across all energy sector segments).
  - Workers at renewable energy infrastructure (including, but not limited to wind, solar, biomass, hydrogen, geothermal, and/or hydroelectric), including those

supporting construction, manufacturing, transportation, permitting, operation/maintenance, monitoring, and logistics.
- Essential support personnel for electricity operations
- Generator set support workers such as diesel engineers used in power generation including those providing fuel.
- Acquisition (SCADA) systems, and utility data centers; Cybersecurity engineers; cybersecurity risk management
- Vegetation management crews and traffic workers who support
- Environmental remediation/monitoring technicians
- Instrumentation, protection, and control technicians

- **Petroleum Industry:**
  - Workers for onshore and offshore petroleum drilling operations; platform and drilling construction and maintenance; transportation (including helicopter operations), maritime transportation, supply, and dredging operations; maritime navigation; well stimulation, intervention, monitoring, automation and control, extraction, production; processing; waste disposal, and maintenance, construction, and operations.
  - Workers for crude oil, petroleum and petroleum product storage and transportation, including pipeline, marine transport, terminals, rail transport, storage facilities and racks and road transport for use as end-use fuels such as gasoline, diesel fuel, jet fuel, and heating fuels or feed stocks for chemical manufacturing.
  - Petroleum and petroleum product security operations center employees and workers who support maintenance and emergency response services.
  - Petroleum and petroleum product operations control rooms/centers and refinery facilities.
  - Retail fuel centers such as gas stations and truck stops, and the distribution systems that support them.
  - Supporting new and existing construction projects, including, but not limited to, pipeline construction.

- **Natural Gas, Natural Gas Liquids (NGL), Propane, and other liquid fuels:**
  - Workers who support onshore and offshore drilling operations, platform and drilling construction and maintenance; transportation (including helicopter operations); maritime transportation, supply, and dredging operations; maritime navigation; natural gas and natural gas liquid production, processing, extraction, storage and transportation; well intervention, monitoring, automation and control; waste disposal, and maintenance, construction, and operations
  - Transmission and distribution pipeline workers, including compressor stations and any other required, operations maintenance, construction, and support for natural gas, natural gas liquid, propane, and other liquid fuels
  - Natural gas, propane, natural gas liquids, and other liquid fuel processing plants, including construction, maintenance, and support operations
  - Natural gas processing plants workers, and those that deal with natural gas liquids
  - Workers who staff natural gas, propane, natural gas liquids, and other liquid fuel security operations centers, operations dispatch and control rooms/centers, and emergency response and customer emergencies (including leak calls) operations
  - Drilling, production, processing, refining, and transporting natural gas for use as end-use fuels, feed stocks for chemical manufacturing, or use in electricity generation
  - Dispatch and control rooms and emergency response and customer emergencies, including propane leak calls
  - Propane gas service maintenance and restoration, including call centers
  - Propane, natural gas liquids, and other liquid fuel distribution centers
  - Propane gas storage, transmission, and distribution centers

- Supporting new and existing construction projects, including, but not limited to, pipeline construction
- Ethanol and biofuel production, refining, and distribution
- Workers in fuel sectors (including, but not limited to nuclear, coal, and gas types and liquid fuels) supporting the mining, manufacturing, logistics, transportation, permitting, operation/maintenance, and monitoring of support for resources

## FINANCIAL SERVICES

- Workers who are needed to process and maintain systems for processing financial transactions and services
- Workers who are needed to maintain orderly market operations to ensure the continuity of financial transactions and services.
- Workers who are needed to provide consumer access to banking and lending services, including ATMs, and to move currency and payments (e.g. armored cash carriers).
- Workers who support financial operations, such as those staffing data and security operations centers
- Workers who support the production and distribution of debit and credit cards.
- Workers providing electronic point of sale support personnel for essential businesses and workers.

## FOOD AND AGRICULTURE

- Workers supporting groceries, pharmacies, and other retail that sells food and beverage products, including but not limited to Grocery stores, Corner stores and convenience stores, including liquor stores that sell food, Farmers' markets, Food banks, Farm and produce stands, Supermarkets, Similar food retail establishments, Big box stores that sell groceries and essentials
- Restaurant carry-out and quick serve food operations – including food preparation, carry-out and delivery food employees
- Food manufacturer employees and their supplier employees—to include those employed in food processing (packers, meat processing, cheese plants, milk plants, produce, etc.) facilities; livestock, poultry, seafood slaughter facilities; pet and animal feed processing facilities; human food facilities producing by-products for animal food; beverage production facilities; and the production of food packaging
- Farm workers to include those employed in animal food, feed, and ingredient production, packaging, and distribution; manufacturing, packaging, and distribution of veterinary drugs; truck delivery and transport; farm and fishery labor needed to produce our food supply domestically
- Farm workers and support service workers to include those who field crops; commodity inspection; fuel ethanol facilities; storage facilities; and other agricultural inputs
- Employees and firms supporting food, feed, and beverage distribution (including curbside distribution and deliveries), including warehouse workers, vendor-managed inventory controllers, blockchain managers, distribution
- Workers supporting the sanitation of all food manufacturing processes and operations from wholesale to retail
- Company cafeterias used to feed employees, particularly employee populations sheltered against COVID-19.
- Workers in food testing labs in private industries and in institutions of higher education
- Workers essential for assistance programs and government payments
- Workers supporting cannabis retail and dietary supplement retail

- Employees of companies engaged in the production of chemicals, medicines, vaccines, and other substances used by the food and agriculture industry, including pesticides, herbicides, fertilizers, minerals, enrichments, and other agricultural production aids
- Animal agriculture workers to include those employed in veterinary health; manufacturing and distribution of animal medical materials, animal vaccines, animal drugs, feed ingredients, feed, and bedding, etc.; transportation of live animals, animal medical materials; transportation of deceased animals for disposal; raising of animals for food; animal production operations; slaughter and packing plants and associated regulatory and government workforce
- Workers who support the manufacture and distribution of forest products, including, but not limited to timber, paper, and other wood products
- Employees engaged in the manufacture and maintenance of equipment and other infrastructure necessary to agricultural production and distribution

## HAZARDOUS MATERIALS

- Workers at nuclear facilities, workers managing medical waste, workers managing waste from pharmaceuticals and medical material production, and workers at laboratories processing test kits
- Workers who support hazardous materials response and cleanup
- Workers who maintain digital systems infrastructure supporting hazardous materials management operations

## HEALTHCARE / PUBLIC HEALTH

- Caregivers
- Workers in other medical facilities
- Manufacturers, technicians, logistics and warehouse operators, and distributors of medical equipment, personal protective equipment (PPE), medical gases, pharmaceuticals, blood and blood products, vaccines, testing materials, laboratory supplies, cleaning, sanitizing, disinfecting or sterilization supplies, and tissue and paper towel products
- Public health / community health workers
- Behavioral health workers (including mental and substance use disorder) responsible for coordination, outreach, engagement, and treatment to individuals in need of mental health and/or substance use disorder services.
- Hospital and laboratory personnel (including accounting, administrative, admitting and discharge, engineering, epidemiological, source plasma and blood donation, food service, housekeeping, medical records, information technology and operational technology, nutritionists, sanitarians, respiratory therapists, etc.).
- Blood and plasma donors and the employees of the organizations that operate and manage related activities
- Workers that manage health plans, billing, and health information, who cannot practically work remotely
- Workers who conduct community-based public health functions, conducting epidemiologic surveillance, compiling, analyzing and communicating public health information, who cannot practically work remotely
- Workers performing information technology and cybersecurity functions at healthcare and public health facilities, who cannot practically work remotely

- Workers providing COVID-19 testing; Workers that perform critical clinical research needed for COVID-19 response.
- Workers performing security, incident management, and emergency operations functions at or on behalf of healthcare entities including healthcare coalitions, who cannot practically work remotely
- Workers who support food, shelter, and social services, and other necessities of life for economically disadvantaged or otherwise needy individuals, such as those residing in shelters
- Pharmacy employees necessary for filling prescriptions
- Workers performing mortuary services, including funeral homes, crematoriums, and cemetery workers
- Workers who coordinate with other organizations to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/behavioral health services to the family members, responders, and survivors of an incident

## HYGIENE PRODUCTS AND SERVICES

- Workers who produce hygiene products.
- Workers in laundromats, laundry services, and dry cleaners
- Workers providing personal and household goods repair and maintenance
- Workers providing disinfection services, for all essential facilities and modes of transportation, and supporting the sanitation of all food manufacturing processes and operations from wholesale to retail
- Workers necessary for the installation, maintenance, distribution, and manufacturing of water and space heating equipment and its components
- Support required for continuity of services, including commercial disinfectant services, janitorial/cleaning personnel, and support personnel functions that need freedom of movement to access facilities in support of front-line employees.

## LAW ENFORCEMENT, PUBLIC SAFETY, FIRST RESPONDERS

- Includes front line and management, personnel include emergency management, law enforcement, Emergency Management Systems, fire, and corrections, search and rescue, tactical teams including maritime, aviation, and canine units.
- Fusion Center employees
- Fire Mitigation Activities
- Hazardous material responders and hazardous devices teams, from government and the private sector.
- Emergency Medical Technicians
- Public Safety Answering Points and 911 call center employees
- Workers – including contracted vendors -- who maintain digital systems infrastructure supporting law enforcement and emergency service operations.
- Workers who support the manufacturing of safety equipment and uniforms for law enforcement, public safety personnel, and first responders.
- Workers who support the operations of firearm or ammunition product manufacturers, retailers, importers, distributors, and shooting ranges.
- Workers who support weather disaster / natural hazard mitigation and prevention activities.
- Private security, private fire departments, and private emergency medical services personnel.
- County workers responding to abuse and neglect of children, elders and dependent adults.

## OTHER COMMUNITY-BASED GOVERNMENT OPERATIONS AND ESSENTIAL FUNCTIONS

- Workers to ensure continuity of building functions, including but not limited to security and environmental controls (e.g., HVAC), the manufacturing and distribution of the products required for these functions, and the permits and inspections for construction supporting essential infrastructure
- Critical government workers, as defined by the employer and consistent with Continuity of Operations Plans and Continuity of Government plans.
- County workers responsible for determining eligibility for safety net benefits
- The Courts, consistent with guidance released by the California Chief Justice
- Workers to ensure continuity of building functions
- Security staff to maintain building access control and physical security measures
- Elections personnel
- Federal, State, and Local, Tribal, and Territorial employees who support Mission Essential Functions and communications networks
- Trade Officials (FTA negotiators; international data flow administrators)
- Employees necessary to maintain news and media operations across various media
- Employees supporting Census 2020
- Weather forecasters
- Clergy for essential support
- Workers that maintain digital systems infrastructure supporting other critical government operations
- Workers at operations centers necessary to maintain other essential functions
- Workers who support necessary credentialing, vetting and licensing operations for transportation workers
- Workers who are critical to facilitating trade in support of the national, state, and local emergency response supply chain
- Workers supporting public and private childcare establishments, pre-K establishments, K-12 schools, colleges, and universities for purposes of distance learning, provision of school meals, or care and supervision of minors to support essential workforce across all sectors
- Staff at government offices who perform title search, notary, and recording services in support of mortgage and real estate services and transactions
- Residential and commercial real estate services, including settlement services
- Workers supporting essential maintenance, manufacturing, design, operation, inspection, security, and construction for essential products, services, and supply chain and COVID 19 relief efforts.

## PUBLIC WORKS

- Workers who support the operation, inspection, and maintenance of essential public works facilities and operations, including bridges, water and sewer main breaks, fleet maintenance personnel, construction of critical or strategic infrastructure, traffic signal maintenance, emergency location services for buried utilities, maintenance of digital systems infrastructure supporting public works operations, and other emergent issues

- Workers such as plumbers, electricians, exterminators, builders, contractors, HVAC Technicians, landscapers, and other service providers who provide services that are necessary to maintaining the safety, sanitation, and essential operation of residences, businesses and buildings such as hospitals, senior living facilities, any temporary construction required to support COVID-19 response
- Workers who support, such as road and line clearing, to ensure the availability of and access to needed facilities, transportation, energy and communications
- Support to ensure the effective removal, storage, and disposal of residential and commercial solid waste and hazardous waste, including landfill operations.
- Workers who support the operation, inspection, and maintenance of essential dams, locks and levees
- Workers who support the inspection and maintenance of aids to navigation, and other government provided services that ensure continued maritime commerce

## RESIDENTIAL/SHELTER FACILITIES AND SERVICES

- Workers in dependent care services, in support of workers in other essential products and services
- Workers who support food, shelter, and social services, and other necessities of life for needy groups and individuals, including in-need populations and COVID-19 responders (including travelling medical staff)
- Workers in animal shelters
- Workers responsible for the leasing of residential properties to provide individuals and families with ready access to available housing
- Workers responsible for handling property management, maintenance, and related service calls who can coordinate the response to emergency "at-home" situations requiring immediate attention, as well as facilitate the reception of deliveries, mail, and other necessary services.
- Workers performing housing construction related activities to ensure additional units can be made available to combat the nation's existing housing supply shortage.
- Workers performing services in support of the elderly and disabled populations who coordinate a variety of services, including health care appointments and activities of daily living
- Workers supporting the construction of housing, including those supporting government functions related to the building and development process, such as inspections, permitting and plan review services that can be modified to protect the public health, but fundamentally should continue and serve the construction of housing (e.g., allow qualified private third-party inspections in case of government shutdown)

## TRANSPORTATION AND LOGISTICS

- Employees supporting or enabling transportation functions, including dispatchers, maintenance and repair technicians, warehouse workers, truck stop and rest area workers, and workers that maintain and inspect infrastructure (including those that require cross-border travel)
- Workers supporting the distribution of food, pharmaceuticals (including materials used in radioactive drugs) and other medical materials, fuels, chemicals needed for water or water treatment and energy Maintenance and operation of essential highway infrastructure, including roads, bridges, and tunnels (e.g., traffic operations centers and moveable bridge operators)
- Employees of firms providing services that enable logistics operations, including cooling, storing, packaging, and distributing products for wholesale or retail sale or use.
- Mass transit workers
- Taxis, transportation services including Transportation Network Companies, and delivery services including Delivery Network Companies

- Workers responsible for operating dispatching passenger, commuter and freight trains and maintaining rail infrastructure and equipment
- Maritime transportation workers - port workers, mariners, equipment operators
- Truck drivers who haul hazardous and waste materials to support critical infrastructure, capabilities, functions, and services
- Bus drivers and workers who provide or support intercity, commuter and charter bus service in support of other essential services or functions
- Automotive repair and maintenance facilities
- Transportation safety inspectors, including hazardous material inspectors and accident investigator inspectors
- Manufacturers and distributors (to include service centers and related operations) of packaging materials, pallets, crates, containers, and other supplies needed to support manufacturing, packaging staging and distribution operations
- Postal and shipping workers, to include private companies
- Employees who repair and maintain vehicles, aircraft, rail equipment, marine vessels, and the equipment and infrastructure that enables operations that encompass movement of cargo and passengers
- Air transportation employees, including air traffic controllers, ramp personnel, aviation security, and aviation management
- Workers who support the maintenance and operation of cargo by air transportation, including flight crews, maintenance, airport operations, and other on- and off- airport facilities workers
- Workers supporting transportation via inland waterways such as barge crew, dredging, river port workers for essential goods
- Workers critical to rental and leasing of vehicles and equipment that facilitate continuity of operations for essential workforces and other essential travel
- Warehouse operators, including vendors and support personnel critical for business continuity (including HVAC & electrical engineers; security personnel; and janitorial staff) and customer service for essential functions

## WATER AND WASTEWATER

Employees needed to operate and maintain drinking water and wastewater/drainage infrastructure, including:

- Operational staff at water authorities
    - Operational staff at community water systems
    - Operational staff at wastewater treatment facilities
    - Workers repairing water and wastewater conveyances and performing required sampling or monitoring
    - Operational staff for water distribution and testing
- Operational staff at wastewater collection facilities
    - Operational staff and technical support for SCADA Control systems
    - Chemical and equipment suppliers to water and wastewater systems and personnel protection
    - Workers that maintain digital systems infrastructure supporting water and wastewater operations